

Serial No. 10/705,575
Reply to Office Action of April 20, 2005

REMARKS

Claims 7 and 10 have been amended. Claims 7-10 remain in the application. Claims 1-6 were previously canceled. It should be appreciated that the amended claims merely clarify the invention described in the specification, and do not add new matter.

Claims 7 and 10 were rejected under 35 U.S.C. §103(a) as being obvious over Terry (US 5,364,303) in view of Korean Patent 2003031219A ('219). The Applicant respectfully traverses this rejection.

U.S. Patent Number 5,364,303 to Terry discloses an air vent with adjustable vanes for controlling air flow direction. In a second embodiment shown in FIGS. 5-8, the air vent 210 includes a housing 212 defining a housing outlet opening 214 in which are mounted a first row of horizontally oriented air vanes 216, and a second row of vertically oriented air vanes 218. Each air vane includes a front edge 220, rear edge 222 and opposed side edges 224, 226. The vanes 216 are operably connected as a unit via a link. One of the middle vanes is the control vane 238. The control vane 238 has a first and second notch 239, 242 in its rear edge 222. A control knob or actuator for initiating the angular movement of the vanes is mounted within the first notch 239. Terry '303 does not disclose a vane having a rear edge with one notch for receiving a compressively resilient pad, or that the vane is disposed within a recess of the knob.

In contradistinction, claim 7 discloses a vent control knob for controlling the position of a vane for an air vent in an automotive vehicle. The vane D includes a front edge A, and an opposed rear edge B having one notch C formed in the rear edge B. The control knob 12 includes an outer surface and an inner surface 14 that defines a recess. A first portion of the inner surface is adjacent a rear edge of the vane, and a second portion of the inner surface is adjacent the front edge of the vane. The knob also includes a side having a portion 16 that is

Serial No. 10/705,575
Reply to Office Action of April 20, 2005

open, for receiving the vane within the recess. The recess defined by the inner surface of the knob is slightly larger than the outer surface of the vane, so that the knob snaps onto the vane, to fittingly engage the knob onto the vane. A compressively resilient silicone pad 18 is received into the one notched portion C of the rear edge B of the vane D. The pad extends beyond the rear edge B to contact the first portion 20 of the inner surface of the knob 12, so as to consistently force the front edge A of the vane into contact with the second portion 22 of the inner surface of the knob. A sturdy and tight fit is maintained between the knob and the vane, so that the knob and the vane move together when changing the direction of the vents. Claim 10 is similar to claim 7, and includes further limitations.

The Korean patent publication KR2003031219A discloses a knob 10 for controlling the air vent of an automobile. The knob includes a recess for receiving the vane 18. An inner surface of the knob includes a notched portion. A shock absorbing material 14 is disposed within the notch in the knob, so that a rear side of the material in the knob is in contact with a front side of the vane 18.

None of the references, alone or in combination with each other, teach or otherwise suggest the claimed invention of claims 7 and 10. Specifically, the Terry '303 reference merely teaches a control vane with two notches in a rear edge of the control vane, and a control knob disposed in one of the two notches. Terry does not disclose a vane having one notch in a rear edge of the control vane and a compressively resilient pad disposed in the one notch, as disclosed by the Applicant. A control knob disposed in one of two notches in the rear edge of the vane is clearly structurally distinguishable from a vane having one notch in the rear edge. Terry does not disclose a compressively resilient pad disposed in the one notch. Terry does not disclose that the vane is disposed in a recess formed in the control knob, as disclosed by the Applicant. Terry

Serial No. 10/705,575
Reply to Office Action of April 20, 2005

'303 does not disclose that the resilient pad forces the front edge of the vane into contact with a second portion of the inner surface of the knob to provide a snug fit between the vane and the knob, as disclosed by the Applicant. The snug fit is advantageous because it insures that the knob and vane move together as one during adjustment of the vane. The notch in the rear of the vane as disclosed by the Applicant for receiving the compressively resilient pad is functionally distinguishable from the notch for receiving the knob disclosed by Terry '303.

The Korean reference merely teaches a knob having a recessed portion and a notch in an inner surface of the recessed portion and a shock absorbing material disposed in the notch, so that a rear side of the shock absorbing material is in contact with a front side of the vane. The Korean reference does not disclose a vane having one notch in a rear edge of the control vane and a compressively resilient pad disposed in the one notch, as disclosed by the Applicant. A knob with a notch for receiving a compressively resistant pad is simply not the same structure as a vane with a notch in a rear edge for receiving a compressively resilient pad.

The combination of references, even if combinable, would not render obvious Applicant's invention as claimed in claims 7 and 10. The combination of Terry and the Korean reference would yield a vane having two notches in a rear edge of the vane. The knob would have a recess for receiving a compressively resilient pad. The knob would be disposed in one of two notches in the rear edge of the vane, such that the compressively resilient pad within the knob would be adjacent the front edge of the vane.

Such a combination is clearly distinguishable from Applicant's invention, in that the present invention discloses a vane with a rear edge having a notch for receiving a compressively resilient pad, and the vane is disposed within a recess formed within the knob. The unobvious feature of the present invention is the positioning of the compressively resilient pad within one

Serial No. 10/705,575
Reply to Office Action of April 20, 2005

notch in the rear edge of the vane in order to urge the front edge of the vane into contact with the second portion of the inner surface of the knob to improve the tactile feel of the knob. The Applicant submits that there is no teaching in the prior art cited by the Examiner to suggest the structure of a vane with a rear edge having a notch for receiving a compressively resilient pad, and the vane is disposed within a recess formed within the knob. The problem solved by the Applicant is different than the problems solved by the cited references, and there is no reason, suggestion or motivation to combine the references. In addition, the Examiner cannot use the Applicant's invention as an instruction manual or template to piece together the teachings of the prior art so that the claimed invention can be rendered obvious.

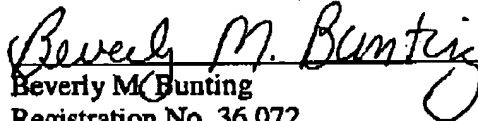
The Applicant provides a new and novel vent control knob for an air vent that provides consistent operation and a positive feel to the user. Therefore, it is respectfully submitted that claims 7 and 10 as amended and the claims dependent therefrom are allowable over the rejection under 35 U.S.C. §103(a).

Based on the above, Applicant submits that the claims are in condition for allowance, which allowance is respectfully solicited. If the Examiner finds to the contrary, it is respectfully

Serial No. 10/705,575
Reply to Office Action of April 20, 2005

requested that the undersigned in charge of this application be called at the telephone number given below to resolve any remaining issues.

Respectfully submitted,


Beverly M. Bunting
Registration No. 36,072
Gifford, Krass, Groh, Sprinkle,
Anderson & Citkowski, P.C.
2701 Troy Center Drive, Suite 330
P.O. Box 7021
Troy, MI 48007-7021
(248) 647-6000

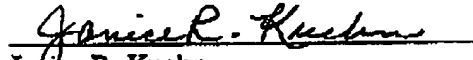
Attorney for Applicant

BMB/gs

GS-W:\Word Processing\bmb\Amendments\TTC12602-amd2.doc

CERTIFICATE UNDER 37 CFR 1.8(a)

I hereby certify that this correspondence is being sent to the United States Patent Office via facsimile (703-872-9306) on June 17, 2005.


Janice R. Kuehn